Answer Key -- Forest and Wildlife Resources

Chapter 2 · Geography

Reading Guide · Glossary · Comprehension · Practice Questions · 10 Puzzles

NCERT Companion Workbook · Based on “Contemporary India II, Geography, NCERT Class X”

Comprehension Questions -- Answered

Q1. Why is biodiversity important to human survival, according to the chapter?

Answer: Plants, animals and micro-organisms together sustain the air, water and soil that human life depends on, and humans are described as only one part of this larger ecological web. Losing biodiversity therefore threatens the very systems that keep people alive, not just the species directly affected. Agriculture and fisheries in particular still rely on traditional and wild genetic diversity for healthy breeding stock.

Q2. What led to the introduction of the Wildlife Protection Act in 1972?

Answer: Conservationists in the 1960s and 1970s were alarmed by the rapid decline in wildlife populations and pressed for a national protection programme. The Act responded by banning hunting, giving legal protection to habitats and publishing an all-India list of protected species. It became the legal foundation for later projects protecting specific animals such as the tiger and the one-horned rhinoceros.

Q3. How do reserved, protected and unclassed forests differ from each other?

Answer: Reserved forests, covering more than half of India's total forest land, are treated as the most valuable for conservation. Protected forests, about a third of the total, are shielded by the Forest Department from further depletion but are used somewhat more freely. Unclassed forests are other forest and wasteland areas managed jointly by government bodies, private owners and local communities, and dominate in the North-east.

Q4. What threats brought the tiger population close to extinction by the 1970s?

Answer: Poaching for the illegal trade in tiger skins and bones, along with shrinking habitat and a declining prey base, pushed tiger numbers down sharply by the early 1970s. Growing human population added further pressure on the forests tigers needed. These combined threats prompted the launch of Project Tiger in 1973 to reverse the decline.

Q5. How did the villagers of Sariska use the law to resist mining?

Answer: Villagers near the Sariska Tiger Reserve in Rajasthan cited the Wildlife Protection Act to oppose mining activity that threatened the reserve. Their action shows local communities actively using existing conservation law rather than simply depending on the government to enforce it. This example illustrates the chapter's broader point that communities can be central actors in conservation.

Q6. What is Joint Forest Management and how does it benefit local communities?

Answer: Joint Forest Management is a programme, formally begun by Odisha in 1988, in which village-level institutions take on the protection of degraded forest land managed by the Forest Department. In return, community members receive benefits such as non-timber forest produce and a share of any timber harvested. It links successful local protection directly to a tangible economic reward for the community.

Q7. How have sacred groves helped conserve biodiversity?

Answer: Many communities have long treated certain forest patches, trees or species as sacred, banning any interference with them out of religious belief. This tradition has kept some of India's forests in a largely untouched, pristine state for generations, independent of any formal government protection. The Bishnoi villages of Rajasthan, where herds of blackbuck and peacocks live undisturbed, are given as an example.

Q8. What lesson does the chapter draw from both environmental destruction and its reversal in India?

Answer: The chapter concludes that local communities everywhere need to be involved in managing natural resources, since both damage and recovery have often depended on community behaviour. It notes that communities are still far from being central to decision-making despite these successes. It recommends only supporting development that is people-centred, environmentally sound and economically worthwhile.

Short-Answer Practice -- Model Answers

Q1. Which act gave legal protection to India's endangered wildlife species?

Answer: The Wildlife Protection Act, 1972.

Reasoning: *It banned hunting, protected habitats and listed species needing safeguarding nationwide, forming the legal backbone of India's later conservation projects.*

Q2. Name the campaign launched in 1973 to protect India's tiger population.

Answer: Project Tiger.

Reasoning: *It was launched because tiger numbers had collapsed from tens of thousands to under two thousand due to poaching and habitat loss.*

Q3. Which movement in the Himalayas is known for stopping tree felling through community action?

Answer: The Chipko Movement.

Reasoning: *Local people physically embraced trees to block logging, showing that grassroots protection could succeed without direct government control.*

Q4. In which state did villagers declare over a thousand hectares of forest a protected Sonchuri?

Answer: Rajasthan, in the Alwar district.

Reasoning: *Five villages set their own rules banning hunting and outside encroachment, an example of community-led conservation independent of the forest department.*

Q5. When was Joint Forest Management formally introduced in India, and by which state?

Answer: In 1988, by Odisha.

Reasoning: *Odisha's resolution linked local institutions to the restoration of degraded forest land in exchange for a share of the resulting produce.*

Objective Practice

A. Multiple Choice Questions

1. Which conservation strategy does NOT directly involve community participation?

a) Joint forest management

b) Beej Bachao Andolan

c) Chipko Movement

✓ **d) Demarcation of wildlife sanctuaries**

2. In which year was Project Tiger launched?

a) 1968

b) 1972

✓ **c) 1973**

d) 1980

3. In which year was the Wildlife Protection Act implemented?

a) 1968

✓ **b) 1972**

c) 1980

d) 1986

4. Which forest category is regarded as most valuable for conservation?

✓ **a) Reserved forests**

b) Protected forests

c) Unclassed forests

d) Community forests

5. Which state has the largest area under permanent forests?

a) Kerala

✓ **b) Madhya Pradesh**

c) Assam

d) Odisha

6. The Chipko Movement is most closely associated with which region?

✓ **a) The Himalayas**

b) The Deccan plateau

c) The Thar desert

d) The Western Ghats

7. Joint Forest Management formally began with a resolution passed by which state?

a) Rajasthan

b) Kerala

✓ **c) Odisha**

d) Assam

8. The Sariska Tiger Reserve, where villagers resisted mining, is located in which state?

a) Madhya Pradesh

✓ **b) Rajasthan**

c) Karnataka

d) Assam

9. Which tree species are worshipped by the Mundas and Santhals of Chota Nagpur?

a) Peepal and banyan

✓ **b) Mahua and kadamba**

c) Tamarind and mango

d) Neem and mahua

10. The great Indian bustard is also known by which local name?

a) Chinkara

b) Hangul

✓ **c) Godawan**

d) Gharial

B. True or False

1. Reserved forests make up more than half of India's total forest land. -- TRUE
2. Unclassed forests are found mostly in the desert regions of Rajasthan. -- FALSE
3. Project Tiger was launched to protect only tigers and no other species. -- FALSE
4. The Bishnoi villages of Rajasthan are known for protecting blackbuck and other animals. -- TRUE
5. Sacred groves allow unrestricted human interference with the forest patch. -- FALSE
6. Joint Forest Management depends on cooperation between forest departments and local institutions. -- TRUE
7. Madhya Pradesh has the smallest share of permanent forest area among Indian states. -- FALSE
8. Butterflies and plants have also been added to India's list of protected species. -- TRUE

C. Match the Following

Column A	Column B
1. Reserved forests	a) Shielded by law from further depletion
2. Protected forests	b) Most valuable category for conservation
3. Unclassed forests	c) Managed by both government and private owners
4. Project Tiger	d) Local institutions restore degraded forest land
5. Chipko Movement	e) Forest patch preserved through religious belief
6. Joint Forest Management	f) Community resistance to deforestation in the Himalayas
7. Sacred grove	g) Tiger reserve where villagers resisted mining
8. Sariska	h) Campaign launched in 1973 to save tigers

Answers: 1-b, 2-a, 3-c, 4-h, 5-f, 6-d, 7-e, 8-g

Higher-Order Thinking (HOTS) Questions -- Model Answers

Q1. The chapter shows both government-led and community-led conservation succeeding in different places. What conditions might make community-led conservation more effective than government control in some regions?

Answer: Community-led conservation can work well where villagers depend directly on the forest for their livelihood, giving them a strong personal stake in protecting it, as seen at Sariska and in the Sonchuri villages of Alwar. Local knowledge of the terrain and species also lets communities enforce rules more quickly and specifically than a distant government department could. Government-led protection may still be needed where local incentives are weak or where a threat, like large-scale poaching networks, extends beyond a single village's reach.

Q2. Why might a plan to save a single endangered species, like the tiger, end up protecting many other unrelated species as well?

Answer: Protecting a tiger's habitat means protecting the entire forest ecosystem that supports its prey base, since tigers depend on other animals lower in the food chain for survival. Efforts like Project Tiger therefore end up conserving the plants, herbivores and smaller predators that share that same forest space. This is why the chapter notes that conservation has shifted from focusing on individual species toward protecting whole areas of biodiversity.

Q3. Sacred groves have survived for centuries through religious belief rather than law. What risk might this conservation method face as social attitudes change over generations?

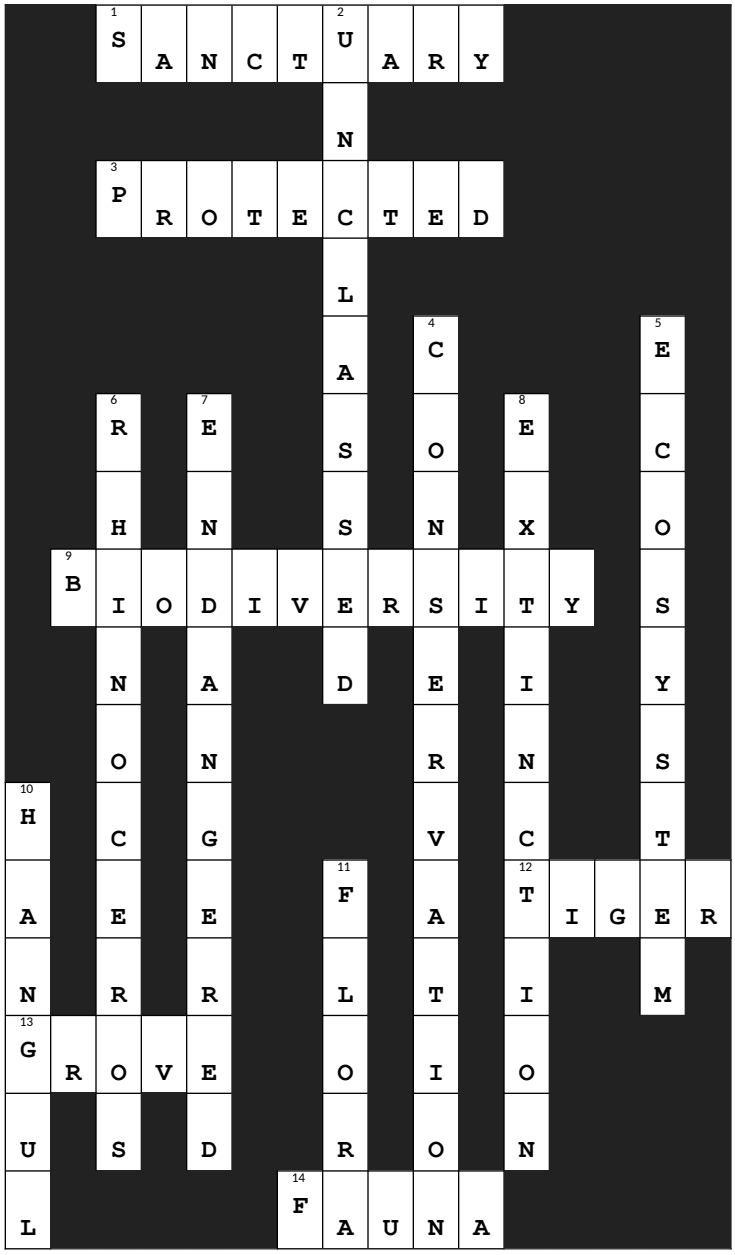
Answer: If younger generations move away from the traditional beliefs that made a grove sacred, the informal social pressure that once prevented logging or hunting there could weaken over time. Without a legal protection status backing it up, a sacred grove could then become vulnerable to clearing or encroachment once the community stops enforcing the taboo itself. This suggests that pairing traditional practices with formal legal recognition could make such protection more durable.

Q4. Compare the incentives that make Joint Forest Management work with the incentives behind the Sariska villagers' independent protection effort.

Answer: Joint Forest Management offers villagers a direct material incentive: a share of non-timber produce and harvested timber in return for protecting degraded forest land alongside the Forest Department. The Sariska villagers' effort, by contrast, was driven by a defensive motive, using the Wildlife Protection Act to block mining that threatened a reserve they valued for its own sake. Both approaches rely on local people caring about the outcome, but one is built around an economic reward and the other around resisting an external threat.

Puzzle Pack -- 10 Puzzles for This Chapter

1. Crossword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3 P R O T E C T E D
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6 R 7 E S O 8 E C
H N S N X O
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N A D E I Y
O N R N S
10 H C G V C T
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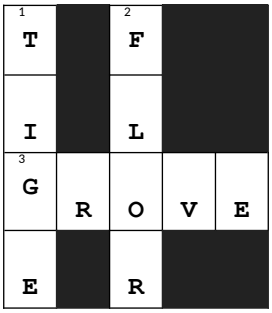
U S D R O N
L 14 F A U N A

2. Mini Crossword



3. Word Search

D	B	X	U	L	E	D	E	S	S	A	L	C	N	U
E	C	O	N	S	E	R	V	A	T	I	O	N	D	P
F	R	H	I	N	O	C	E	R	O	S	Z	A	E	R
I	G	F	T	X	F	Z	Y	C	B	R	Y	R	D	O
L	N	R	O	S	F	E	T	P	U	D	T	A	A	T
D	I	L	S	A	G	C	I	E	S	E	T	K	R	E
L	H	A	E	N	Q	O	S	X	T	R	T	N	G	C
I	C	I	P	C	R	S	R	T	A	E	A	I	E	T
W	A	R	Y	T	E	Y	E	I	R	G	T	H	D	E
T	O	A	T	U	S	S	V	N	D	N	I	C	O	D
I	P	H	O	A	E	T	I	C	F	A	B	N	K	G
G	I	G	I	R	R	E	D	T	L	D	A	A	P	R
E	J	L	B	Y	V	M	O	I	O	N	H	C	I	O
R	H	E	R	N	E	X	I	O	R	E	Y	X	H	V
F	A	U	N	A	D	O	B	N	A	V	B	V	C	E

4. Cryptogram

Encoded: PKXXAGUCUQW NGR ENFW CKBQCMQV IVKCQPC UGRUN'W OKVQWCW NGR WIQPUQW.

Plain: Communities and laws together protect India's forests and species.

Key: A=U B=G C=T D=V E=L F=W G=N H=Z I=P J=Y K=O L=K M=H N=A O=F P=C Q=E R=D S=Q T=X U=I V=R W=S X=M Y=J Z=B

5. Caesar Coded Message

Encoded: JSVIWX ERH AMPHPMJI VIWSYVGIW. GSQQYRMXMIW ERH PEAW XSKIXLIV TVSXIGX MRHME'W JSVIWXW ERH WTIGMIW.

Plain: Forest and Wildlife Resources. Communities and laws together protect India's forests and species.

Shift: 4

6. Word Scramble

1. DEEGRDDA → DEGRADED

2. RRNEHSOCOI → RHINOCEROS

3. TTPCEREDO → PROTECTED

4. ETSIOYBP → BIOTYPES

5. RLOFA → FLORA

6. FIDWLLEI → WILDLIFE

7. EPCIESS → SPECIES

8. GNUAHL → HANGUL

9. GLIARAH → GHARIAL

10. COIKHP → CHIPKO

7. Acrostic

W -- WILDLIFE

I -- BIODIVERSITY

L -- UNCLASSED

D -- DEGRADED

L -- HANGUL

I -- HABITAT

F -- FLORA

E -- EXTINCTION

Theme: WILDLIFE

8. Match the Pairs

A → 1

B → 8

C → 3

D → 7

E → 6

F → 5

G → 2

H → 4

9. Fill in the Blanks

1. The web of interdependence linking living beings and their surroundings is an _____. → ECOSYSTEM

2. The collective plant life of a region is referred to as its _____. → FLORA

3. A forest patch left untouched due to religious belief is called a sacred _____. → GROVE

4. The Kashmir stag, also called the _____, received special legal protection. → HANGUL

5. A protected area set aside to safeguard wild animals is called a _____. → SANCTUARY

6. Complete disappearance of a species from the earth is called _____. → EXTINCTION

7. Species at serious risk of dying out are described as _____. → ENDANGERED

8. The illegal hunting of protected wild animals is known as _____. → POACHING

10. Odd One Out

1. Sacred grove -- protected by tradition, not official forest classification

2. Mahua -- a tree species, not an animal given legal protection

3. Poaching -- threatens wildlife rather than conserving it

4. Extinction -- describes species loss, not an ecological relationship